	177.	La contraction of the contractio	DB	Time stamp
L Number	Hits	Search Text	l DB	Time Stamp
-	1	("20030039087").PN.	USPAT;	2003/05/20
_	1	("5849135").PN.	US-PGPUB USPAT;	14:39
	,		US-PGPUB	18:24
-	4651	vacuum near3 chuck	USPAT; US-PGPUB	2003/05/06 18:25
~	0	vacuum near3 chuck3 and (substrate or	USPAT;	2003/05/06
	205.6	wafer) (vacuum near3 chuck) and (substrate or	US-PGPUB	18:25 2003/05/06
_	3956	(vacuum nears chuck) and (substrate or   wafer)	USPAT; US-PGPUB	18:27
-	3233	(vacuum near chuck) and (substrate or	USPAT;	2003/05/06
_	2118	wafer)   (vacuum near chuck) near7 (substrate or	US-PGPUB USPAT;	18:27 2003/05/06
	]	wafer)	US-PGPUB	18:29
_	1883	((vacuum near chuck) near7 (substrate or wafer)) and @ad<20010827	USPAT; US-PGPUB	2003/05/07 09:17
-	1467	(((vacuum near chuck) near7 (substrate or	USPAT;	2003/05/06
_	246	wafer)) and @ad<20010827) and partic\$5 {(((vacuum near chuck) near7 (substrate	US-PGPUB USPAT;	19:17
	230	or wafer)) and @ad<20010827) and	US-PGPUB	11:29
	0	partic\$5) and actuator	USPAT;	2003/05/06
_		((((vacuum near chuck) near7 (substrate or wafer)) and @ad<20010827) and	US-PGPUB	18:57
		partic\$5) and (impulse near7 actuator)	Hanam	2002/05/26
_	53	((((vacuum near chuck) near7 (substrate or wafer)) and @ad<20010827) and	USPAT; US-PGPUB	2003/05/06 18:58
		partic\$5) and impulse		
_	39909	impulse and partic\$5	USPAT; US-PGPUB	2003/05/06 19:18
-	411	impulse and (remov\$4 near7 partic\$5) and	USPAT;	2003/05/06
_	352	(substrate or wafer) (impulse and (remov\$4 near7 partic\$5) and	US-PGPUB USPAT;	19:20 2003/05/06
	332	(substrate or wafer)) and @ad<20010827	US-PGPUB	19:28
-	1035	(134/1.1,1.2,1.3).ccls.	USPAT; US-PGPUB	2003/05/06 19:29
_	7	((134/1.1,1.2,1.3).ccls.) and impulse	USPAT;	2003/05/07
1	200	//124/1 1 1 2 1 2) and a hand (without 62)	US-PGPUB	08:22 2003/05/07
, <del>-</del>	200	((134/1.1,1.2,1.3).ccls.) and (vibrat\$3 or agita\$4)	USPAT; US-PGPUB	09:00
-	200	((134/1.1,1.2,1.3).ccls.) and (vibrat\$3	USPAT;	2003/05/07
_	18	or agita\$4) { ((134/1.1,1.2,1.3).ccls.) and (vacuum	US-PGPUB USPAT;	09:01 2003/05/07
		near chuck)	US-PGPUB	09:01
=	1883	((vacuum near chuck) near7 (substrate or wafer)) and @ad<20010827	USPAT; US-PGPUB	2003/05/07
-	1295	((vacuum near chuck) near3 (substrate or	USPAT;	2003/05/07
	118	wafer)) and @ad<20010827 (((vacuum near chuck) near3 (substrate or	US-PGPUB USPAT;	09:46 2003/05/07
		wafer)) and @ad<20010827 ) and (spherical	US-PGPUB	10:36
_	264	or hemispherical) 156/345.51.cc1s.	USPAT;	2003/05/07
			US-PGPUB	10:36
-	24	156/345.51.ccls. and (vacuum near chuck)	USPAT; US-PGPUB	2003/05/07 10:37
-	303	((((vacuum near chuck) near7 (substrate	USPAT;	2003/05/07
		or wafer)) and @ad<20010827) and partic\$5) and (vibrat\$4 or agitat\$4)	US-PGPUB	11:31
-	303	(((((vacuum near chuck) near7 (substrate	USPAT;	2003/05/07
		or wafer)) and @ad<20010827) and	US-PGPUB	11:34
		partic\$5) and (vibrat\$4 or agitat\$4)) not   156/345.51.ccls.	4	
-	0	((((((vacuum near chuck) near7 (substrate	USPAT;	2003/05/07
(		or wafer)) and @ad<20010827) and partic\$5) and (vibrat\$4 or agitat\$4)) not	US-PGPUB	11:35
		156/345.51.ccls.) and (hemispherical		
		near3 reinforcement)		Į į

[-	0	((((((vacuum near chuck) near7 (substrate or wafer)) and @ad<20010827) and	USPAT; US-PGPUB	2003/05/07
		partic\$5) and (vibrat\$4 or agitat\$4)) not 156/345.51.ccls.) and (hemispherical		
_	8		USPAT;	2003/05/07
-	3648	near7 reinforcement) h011021/\$.ipc. and ((remov\$4 or eliminat\$4 or clean\$4) near7 partic\$5)	US-PGPUB JPO; DERWENT	14:50 2003/05/07 14:57
_	1233	h011021/\$.ipc. and ((remov\$4 or eliminat\$4 or clean\$4) near7 partic\$5	JPO; DERWENT	2003/05/07
-	55	near4 (substrate or wafer)) c23c016/\$.ipc. and ((remov\$4 or e1iminat\$4 or c1ean\$4) near7 partic\$5	JPO; DERWENT	2003/05/07
-	1244	near4 (substrate or wafer)) (h011021/\$.ipc. and ((remov\$4 or	JPO;	2003/05/07
}		eliminat\$4 or clean\$4) near7 partic\$5 near4 (substrate or wafer))) or	DERWENT	14:59
,		(c23c016/\$.ipc. and ((remov\$4 or eliminat\$4 or clean\$4) near7 partic\$5 near4 (substrate or wafer)))		
-	2123	h011021/\$.ipc. and ((vibrat\$4 or agitat\$4 or actuat\$3) near7 (substrate or wafer))	JPO; DERWENT	2003/05/07
-	39	((h011021/\$.ipc. and ((remov\$4 or eliminat\$4 or clean\$4) near7 partic\$5 near4 (substrate or wafer))) or	JPO; DERWENT	2003/05/07
	<u>}</u>	(c23c016/\$.ipc. and ((remov\$4 or eliminat\$4 or clean\$4) near7 partic\$5		
		near4 (substrate or wafer)))) and (h011021/\$.ipc. and ((vibrat\$4 or agitat\$4 or actuat\$3) near7 (substrate or		
-	114	wafer))) c23c016/\$.ipc. and ((vibrat\$4 or agitat\$4	JPO;	2003/05/07
-	0	or actuat\$3) near7 (substrate or wafer)) (c23c016/\$.ipc. and ((remov\$4 or eliminat\$4 or clean\$4) near7 partic\$5	DERWENT JPO; DERWENT	15:27   2003/05/07   15:27
		near4 (substrate or wafer))) and (c23c016/\$.ipc. and ((vibrat\$4 or		
_	5512	<pre>agitat\$4 or actuat\$3) near7 (substrate or wafer))) ((remov\$4 or eliminat\$4 or c1ean\$4)</pre>	USPAT;	2003/05/07
		near7 partic\$5 near4 (substrate or wafer))	US-PGPUB	15:30
-	7534	<pre>((vibrat\$4 or agitat\$4 or actuat\$3) near7 (substrate or wafer)) ( ((remov\$4 or eliminat\$4 or clean\$4)</pre>	JPO; DERWENT JPO;	2003/05/07 15:31 2003/05/07
<u> </u>		near7 partic\$5 near4 (substrate or wafer))) and ( ((vibrat\$4 or agitat\$4 or	DERWENT	15:29
-	6530	actuat\$3) near7 (substrate or wafer))) (remov\$4 or eliminat\$4 or clean\$4) near7 partic\$5 near7 (substrate or wafer)	USPAT; US-PGPUB	2003/05/07
-	7534	(vibrat\$4 or agitat\$4 or actuat\$3) near7 (substrate or wafer)	JPO; DERWENT	2003/05/07 15:33
-	11947	<pre>(vibrat\$4 or agitat\$4 or actuat\$3) near7 (substrate or wafer)</pre>	USPAT; US-PGPUB	2003/05/07
_	924	((remov\$4 or eliminat\$4 or clean\$4) near7   partic\$5 near7 (substrate or wafer) ) and ((vibrat\$4 or actuat\$3) near7	USPAT; US-PGPUB	2003/05/07
-	793	(substrate or wafer)) (((remov\$4 or eliminat\$4 or clean\$4)	USPAT;	2003/05/07
		near7 partic\$5 near7 (substrate or wafer) ) and ((vibrat\$4 or agitat\$4 or actuat\$3) near7 (substrate or wafer))) and	US-PGPUB	18:10
-	19	<pre>@ad&lt;20010827 (((((remov\$4 or eliminat\$4 or clean\$4)</pre>	USPAT;	2003/05/07
		<pre>near7 partic\$5 near7 (substrate or wafer) ) and ((vibrat\$4 or agitat\$4 or actuat\$3) near7 (substrate or wafer))) and</pre>	US-PGPUB	15:54
-	1	<pre>@ad&lt;20010827) and vacuum) and reinforc\$5 5625249.pn.</pre>	USPAT; US-PGPUB	2003/05/07 15:54

-	411	((((remov\$4 or eliminat\$4 or clean\$4)	USPAT;	2003/05/07
1		near7 partic\$5 near7 (substrate or wafer)	US-PGPUB	18:07
		) and ((vibrat\$4 or agitat\$4 or actuat\$3)	l	1
		near7 (substrate or wafer))) and	1	
	_	@ad<20010827) and vacuum		1
-	195		USPAT;	2003/05/07
		near7 partic\$5 near7 (substrate or wafer)	US-PGPUB	18:07
į	l	) and ((vibrat\$4 or agitat\$4 or actuat\$3)	l	1
		near7 (substrate or wafer))) and		]
	107	@ad<20010827) and 134/\$.ccls.	HCDAM.	2003/05/07
-	127	(((((remov\$4 or eliminat\$4 or clean\$4)   near7 partic\$5 near7 (substrate or wafer)	USPAT; US-PGPUB	18:09
		) and ((vibrat\$4 or agitat\$4 or actuat\$3)	05-10101	10.09
1	Į.	near7 (substrate or wafer))) and	į	Į.
		@ad<20010827) and 134/\$.ccls.) not		]
		(((((remov\$4 or eliminat\$4 or clean\$4)		]
		near7 partic\$5 near7 (substrate or wafer)		ì
	1	) and ((vibrat\$4 or agitat\$4 or actuat\$3)	l	1
	1	near7 (substrate or wafer))) and	ĺ	ł.
	1	@ad<20010827) and vacuum)		1
-	0	((((((remov\$4 or eliminat\$4 or clean\$4)	USPAT;	2003/05/07
	l	near7 partic\$5 near7 (substrate or wafer)	US-PGPUB	18:09
		) and ((vibrat\$4 or agitat\$4 or actuat\$3)	ļ	
	[	near7 (substrate or wafer))) and	ļ	1
	i	@ad<20010827) and 134/\$.ccls. ) not		ŧ
	1	(((((remov\$4 or eliminat\$4 or clean\$4)	1	1
	1	near7 partic\$5 near7 (substrate or wafer)	İ	}
}	}	) and ((vibrat\$4 or agitat\$4 or actuat\$3) near7 (substrate or wafer))) and	ł	}
		(ad<20010827) and vacuum)   and vacuum	ļ	Į.
_	789		USPAT;	2003/05/07
	1	120,770,002B. and vacuum	US-PGPUB	18:10
-	739	(118/728.ccls. and vacuum) and	USPAT;	2003/05/07
}	}	@ad<20010827	US-PGPUB	18:22
-	148	((118/728.ccls. and vacuum) and	USPAT;	2003/05/07
		@ad<20010827) and (vacuum near4 (chuck or	US-PGPUB	18:46
	Ì	hold or held))		1
-	197	12	USPAT;	2003/05/07
}	147	impulse	US-PGPUB	18:49 2003/05/07
-	147	(piston near4 (vibrat\$4 or agitat\$4)) and impulse	USPAT; US-PGPUB	18:51
_	117	1 •	USPAT;	2003/05/12
	111	and impulse) and fluid	US-PGPUB	17:09
_	6	1	USPAT;	2003/05/12
	1	(US-20030057513-s or US-20020061720-s or	US-PGPUB	15:13
	1	US-20020006876-\$ or		
}	[	US-20010015314-\$).did.		
-	1843	(susceptor or substrate or wafer) near7	USPAT;	2003/05/12
	1	rib	US-PGPUB	17:15
1 -	16	(susceptor or substrate or wafer) near7 (	USPAT;	2003/05/12
}		reinforcement adj rib)	US-PGPUB	17:11
-	1605	((susceptor or substrate or wafer) near7	USPAT;	2003/05/12
	1170	rib ) and @ad<20010827	US-PGPUB	17:17
-	1170	118/728.ccls.	USPAT;	2003/05/12
1_	264	156/345.51.ccls.	US-PGPUB USPAT;	17:18
1 -	204	1 100/543.51.0C18.	USPAT; US-PGPUB	2003/05/12 17:18
-	1264	118/728.ccls. or 156/345.51.ccls.	US-PGPUB USPAT;	2003/05/12
(	1204	110, 720.0013. 01 130/343.31.0013.	US-PGPUB	17:18
-	12	(((susceptor or substrate or wafer) near7	USPAT;	2003/05/12
1	]	rib ) and @ad<20010827) and	US-PGPUB	17:19
		(118/728.ccls. or 156/345.51.ccls.)		
-	721	118/52.ccls.	USPAT;	2003/05/20
			US-PGPUB	17:54
1-	228	118/52.ccls. and (vacuum near7 (substrate	USPAT;	2003/05/20
1		or wafer))	US-PGPUB	16:14
-	466	118/728.ccls. and (vacuum near7	USPAT;	2003/05/20
_	460	(substrate or wafer))	US-PGPUB	18:02
-	460	(118/728.ccls. and (vacuum near7 (substrate or wafer))) not (118/52.ccls.	USPAT; US-PGPUB	2003/05/20 17:56
(	į į	and (vacuum near7 (substrate or wafer)))	05 EGE 015	1,
	<del></del>	, ,	<del></del>	

-	433	((118/728.ccls. and (vacuum near7	USPAT;	12002/05/00
		(substrate or wafer))) not (118/52.ccls. and (vacuum near7 (substrate or wafer)))	US-PGPUB	2003/05/20 17:56
_	319	(substrate or wafer))) not (118/52.ccls. and (vacuum near7 (substrate or wafer))))	USPAT; US-PGPUB	2003/05/20 18:03
_	1	and @ad<20010827) and (vacuum near3 (substrate or wafer)) 5849135.pn.	USPAT; US-PGPUB	2003/05/21 09:22